

ABSTARCT OF THE INVENTION

The invention relates to a burner apparatus (1) for burning fuel (5) with air (4) to combustion gas, in particular within a combustion turbine, comprising a premixing
5 chamber (3) for premixing fuel (5) and air (4) with. The premixing chamber (3) having an air inlet (8) for air (4) to enter said premixing chamber (3), a fuel inlet (11) for a gaseous or liquid fuel (5) to enter said premixing chamber (3), and an outlet (12) for a mixture of air (4) an fuel (5) wherein, the fuel inlet (11) being located between said air inlet (8) and said outlet (12). The burner apparatus (1) Further comprises at
10 least one air blocking member (2) situated at the air inlet (8) for stabilising a burner premixing flame by locally blocking the flow of air (4) entering said premixing chamber (3) so that downstream said outlet (12) a locally inhomogeneous fuel concentration (23) results generating a locally hot stream of combustion gas being
hotter than the average flame temperature.

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Fig. 1